

What is claimed is:

1. A pressure sealing apparatus for a ferroelectric liquid crystal display,
comprising:

means for pressurizing a liquid crystal display panel; and

5 a heat coil provided at the pressurized surface of the liquid crystal display panel
pressurizing means to heat the liquid crystal display.

2. The pressure sealing apparatus according to claim 1, further comprising:

a plurality of voltage-applying bars provided at one end of the liquid crystal

10 display panel pressurizing means in contact with electrode pads of the liquid crystal
display panel upon pressurizing of the liquid crystal display panel.

3. The pressure sealing apparatus according to claim 2, further comprising:

an elastic member provided between the voltage-applying bars and the liquid

15 crystal display panel pressurizing means to elastically pressurize the voltage-applying
bars into the electrode pads.

4. The pressure sealing apparatus according to claim 2, further comprising:

a voltage controller for controlling voltages applied to the voltage-applying bars.

20 5. The pressure sealing apparatus according to claim 1, further comprising:

a lower plate for supporting the liquid crystal display panel; and

a second heat coil at the lower plate for heating the liquid crystal display panel.

6. The pressure sealing apparatus according to claim 1, further comprising:

5 a temperature controller for controlling a temperature of the heat coil.

7. The pressure sealing apparatus according to claim 6, further comprising:

a lower plate for supporting the liquid crystal display panel from the lower
portion thereof; and

10 a second heat coil provided at the lower plate to heat the liquid crystal display
panel by the control of the temperature controller.

8. A method of pressure-sealing a ferroelectric liquid crystal display,
comprising:

15 injecting a ferroelectric liquid crystal into a liquid crystal display panel;
pressurizing the liquid crystal display panel into which the ferroelectric liquid
crystal has been injected;

applying an electric field to the liquid crystal display panel simultaneously with
the pressurization of the liquid crystal display panel; and

20 performing a temperature treatment of the liquid crystal display panel

simultaneously with the pressurization of the liquid crystal display panel.

9. The method according to claim 8, wherein the temperature treatment includes:

5 cooling the ferroelectric liquid crystal from a temperature corresponding to a nematic phase of the ferroelectric liquid crystal to a temperature of a phase-change to a smectic phase.

10. The method according to claim 8, further comprising the steps of:

10 sealing a liquid crystal injection hole into which the liquid crystal is injected, after a cell gap of the liquid crystal display panel is uniform.

11. A pressure sealing apparatus for a ferroelectric liquid crystal display, comprising:

15 an upper pressurizing plate;
a plurality of voltage-applying bars formed at an edge of the upper pressurizing plate;
a lower plate;
a liquid crystal display panel formed between the upper pressurizing plate and
20 the lower plate; and
a heat coil formed at the interior of the upper pressurizing plate and the lower

plate.

12. The pressure sealing apparatus of claim 11, further comprising electrode pads formed on the voltage-applying bars.

5

13. The pressure sealing apparatus of claim 11, further comprising a rib formed on the upper end of the voltage-applying bars.

14. The pressure sealing apparatus of claim 13, wherein a spring is wound over the rib.

10

15. The pressure sealing apparatus of claim 11, further comprising a voltage controller for applying voltage to the voltage-applying bars.

16. The pressure sealing apparatus of claim 11, wherein a heat coil-receiving hole is formed at the interior of each of the upper pressurizing plate and the lower plate.

15

17. The pressure sealing apparatus of claim 16, wherein a heat coil is formed in the heat coil-receiving hole.

20

18. The pressure sealing apparatus of claim 17, further comprising a temperature controller for applying a current to the heat coil.

19. The pressure sealing apparatus of 11, wherein the upper ends of the voltage-applying bars are provided in bar inserting holes formed in the upper pressurizing plate.

5

20. The pressure sealing apparatus of claim 19, wherein the lower portion of the bar inserting holes are provided with a stopper protruding into the inner side of the bar inserting holes.

10

21. The pressure sealing apparatus of claim 11, wherein the liquid crystal display panel includes:

a ferroelectric liquid crystal;

an upper substrate;

wherein the upper substrate includes a common electrode and an upper

15 alignment film;

a lower substrate;

wherein the lower substrate includes a pixel electrode and a lower alignment film.

20

22. The pressure sealing apparatus of claim 21, further comprising data shorting bars connected to a plurality of data signal wires at an edge of the lower substrate.

23. The pressure sealing apparatus of claim 22, further comprising a plurality of data voltage-applying pads connected to the data shorting bars on an edge of the lower substrate.

5

24. The pressure sealing apparatus of claim 22, wherein the data shorting bars connect the data signal wires to a ground voltage source.

25. The pressure sealing apparatus of claim 21, further comprising gate shorting bars connected to a plurality of gate signal wires at an edge of the lower substrate.

10

26. The pressure sealing apparatus of claim 25, further comprising a plurality of gate voltage-applying pads connected to the gate shorting bars on an edge of the lower substrate.

15

27. The pressure sealing apparatus of claim 25, wherein the gate shorting bars connect the gate signal wires to a ground voltage source.

28. The pressure sealing apparatus of claim 21, further comprising a plurality of Vcom pads provided at least two edges of the lower substrate to be connected to the common electrode.

20

29. The pressure sealing apparatus of claim 28, wherein the Vcom pads are connected to the common electrode through Ag dots.

5 30. The pressure sealing apparatus of claim 21, further comprising a gap formed between the upper substrate and the lower substrate.

31. The pressure sealing apparatus of claim 30, wherein a sealant is formed in the gap.